Questions and Comments Received During the OREFT Workshop
November 9, 2000
Sacramento, California

1. ***Comment:*** Stakeholders want to be able to review protocols, testing parameters, and temperature profiles.

   Response: The ARB staff will post protocols for all testing conducted in the development of the control measure on the OREFT web page. Stakeholders may comment on the protocols after posting. The OREFT web address is: http://www.arb.ca.gov/msprog/offroad/oreft/oreft.htm

2. ***Question:*** Equipment used for testing—is it truly *representative* of the equipment population in use?

   Response: The type of equipment used for testing is based on survey data from the ARB's Planning and Technical Services Division. The specifics on how the survey was conducted will be posted on an upcoming OREFT web page.

3. ***Question:*** One of the key issues of this control measure is the notion of responsibility. Who would be ultimately responsible in the event of non-compliance—engine manufacturers, tank manufacturers, system integrators, or end users?

   Response: The ARB staff is currently evaluating the approach that will be used to implement the proposed control measure. How the control measure is implemented (e.g., certification of engine types) will have a direct bearing on who will be held responsible from a compliance standpoint. Those parties affected by the proposed control measure will be informed of, and given the opportunity to comment on, the implementation approach.

4. ***Comment:*** The ARB has completely failed in terms of understanding how the small engine industry operates. There needs to be more discussion.

   Response: The ARB staff will engage in ongoing discussions with industry representatives to gain more understanding of the issues important to small engine manufacturers. The ARB staff welcomes input on the development of the proposed control measure from industry representatives, trade associations, and other affected parties.

5. ***Comment:*** Many pieces of equipment (e.g., mowers) are repaired while on their side. With pressurized fuel tanks, fuel can spray out and injure the operator. Any accidents would then result in liability for the manufacturer.

   Response: The safety aspects of equipment subject to regulatory control should be considered and addressed by the manufacturer of the equipment.

6. ***Comment:*** Outreach to stakeholders has fallen short—Kelch Corporation, for example, manufactures 15 different types of fuel tanks with varying degrees of venting and supplies those tanks to over 100 OEMs. There is no evidence that these OEMs have been contacted.

   Response: The ARB staff has contacted over 500 stakeholders, including engine manufacturers, tank manufacturers, and system integrators. We will continue to widen our stakeholder base by surveying equipment retailers. We encourage stakeholders to identify additional contacts that may be affected by the proposed control measure.

7. ***Comment:*** The ARB has not investigated the policy issues surrounding this measure—the U.S. EPA's requirements for instituting control measures impacting small businesses is a lengthy one, well beyond the stated timeframe for this control measure.

   Response: The ARB staff is aware of the U.S. EPA's requirements surrounding mobile source controls and will proceed through appropriate channels to satisfy federal requirements. For California, the requirements are typically addressed through a wavier granted by U.S. EPA. The federal waiver issue is dealt with after adoption of a control measure by the ARB.

8. ***Comment:*** The ARB has not addressed the performance implications of the control measure—changing a tank's venting *will* impact the engine performance and will likely impact a complying engine's ability to meet exhaust emission standards.

   Response: Depending upon the evaporative control technology used, engine performance and exhaust emissions may be affected. Ultimately, all engines sold in California must meet California standards for exhaust emissions and evaporative emissions, following their adoption into regulation. The ARB staff is currently researching the differences in evaporative emissions associated with off road equipment used in residential applications and off road equipment used commercially.

9. ***Question:*** What statistical tools were used to support the assumption that sub-populations chosen for testing are representative of the true population?

   Response: Equipment population information used for the OREFT proposed control measure is based on survey data from the ARB's Planning and Technical Support Division. The specifics on how the survey was conducted will be posted on an upcoming OREFT web page.

10. ***Question:*** What is the 'temperature correction factor' used by ARB for this control measure?

    Response: Specific factors used by the Planning and Technical Support Division in the development of the emissions inventory will be posted on upcoming OREFT web pages.

11. ***Question:*** How accurate is the data describing what types of equipment are actually in use?

    Response: Survey work is planned which will address the population categories of off-road equipment actually in use.

12. ***Question:*** What about the notion of a small volume exemption to the control measure?

    Response: The ARB staff will evaluate appropriate exemptions to any proposed control measure after examining all relevant and available data, including the relative number of engine and tank suppliers to the industry as a whole and the impact of any exemptions on the expected reduction in emissions.

13. ***Question:*** How is the control measure going to deal with the issue of tampering?

    Response: Through existing federal requirements, any proposed control measure will address the issue of emissions control equipment tampering.

14. ***Comment:*** 16 tpd vs. 24 tpd—which is it? —There has been a mixed message.

    Response: 24 tons per day is the current estimate determined by the Planning and Technical Services Division and includes preempted and non-preempted equipment. The estimate is expected to change as emission factors and population estimates are further refined.

15. ***Question:*** What about the durability issue of required controls?

    Response: The ARB staff is currently evaluating various options for implementing the proposed control measure. Issues of durability will be addressed as the proposed control measure is developed.

16. ***Comment:*** Manufacturers may fit one type (size) engine with different tank sizes for a variety of different purposes—the total emissions from these individual systems would be different; therefore, the idea of a single standard for a given engine displacement will not work.

Response: The ARB staff plans to test fuel tanks of various sizes, and at various fill levels, to evaluate the associated evaporative emissions. The use of engine displacement as the basis for the proposed control measure is currently under review. The ARB staff will evaluate various approaches to implementing the proposed control measure and encourages relevant input from stakeholders.

17. ***Comment:*** The ARB needs to consider the cost-effectiveness of this measure, particularly if manufactures, distributors, etc., will be expected to purchase SHEDs.

    Response: The ARB staff is currently evaluating various options for implementing the proposed control measures as well as how compliance will be assured. A cost-effectiveness analysis will be included in the staff report, as it is for all control measures.

18. ***Question:*** How will the control measure avoid the imposition of secondary standards (a set of standards divided into secondary standards through the engine manufacturers and tank manufacturers)?

    Response: The ARB will develop a set of performance standards for the equipment. It would be up to the system integrators, fuel tank, and engine manufacturers to collectively produce a unit that meets our performance standards.

19. ***Question:*** Will labels on equipment be required?

    Response: Labeling equipment to indicate compliance with a given year's applicable emissions standards will be considered in the development of the proposed control measure.

20. ***Question:*** What about equipment that cannot be tested in a SHED? (i.e., too big).

    Response: The ARB staff is evaluating various testing approaches that might be used to demonstrate that equipment meets proposed evaporative emissions standards. With respect to SHED testing, the ARB staff is not aware of any small off-road equipment less than 25 horsepower that would not fit into SHEDs operated by the ARB.

21. ***Question:*** What about using a material-based approach to imposing standards on fuel tanks?

    Response: ARB staff will consider the feasibility of a materials-based approach.

22. ***Question:*** How will testing address the emissions from connectors, paint, etc., from a newly purchased unit?

Response: Evaporative emissions from the entire unit will be measured. However, for comparison to a standard, only those emissions above the baseline, or "background," emissions will be calculated.

23. ***Question:*** If this measure is approached from a consumer product standpoint, how will it be enforced?

    Response: ARB Compliance Division staff would purchase a small, off road unit "off-the-shelf" from a retailer. The unit would then be tested according to adopted test procedures specified in the regulations. Appropriate enforcement action would follow if the unit fails to comply with the performance standards. Enforcement actions are typically dealt with on a case-by-case basis.

24. ***Question:*** Given the complexity of this measure, the stated timeframe is impossible to meet.

    Response: The ARB staff recognizes the aggressive nature of the timeframe. Stakeholders and other interested parties will be consulted throughout the regulatory development process.